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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,569	09/20/2001	Craig Braswell Owens	10547-0024-999	5722

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THE DIRECTV GROUP INC
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EXAMINER

JONES, PRENELL P

ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,569

Applicant(s)

OWENS ET AL.

Examiner

Prenell P Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/20/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 26-31 is/are allowed.
- 6) ☐ Claim(s) 1,3-5,9,10,14-16,21,24 and 25 is/are rejected.
- 7) ☐ Claim(s) 2,6-8,11-13,17-20, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 24 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claims 24 and 25 recites the limitation "said memory" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 3, 4, 9, 10, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lucas in view of Ramanathan et al and Collins et al.

Regarding claims 1 and 15, Lucas discloses a communication system wherein devices such as DSL or cable modems have a data connection to the Internet, PSTN and POTS, whereby configuration data is obtained from a remote server via POTS lines utilizing DTMF tones (paragraph 0004-0008). Lucas further discloses central office coupled to a PSTN and Internet (data network) (paragraph 0013). However, Lucas is silent on a remote server detecting errors in a broadband modem. In analogous art, Ramanathan discloses communication in a broadband data access system whereby servers, which are remote to the multiple subscribers and associated broadband modems calculate and monitor throughput, which includes early detection of faults/errors, diagnostics test that test whether throughput errors is caused by a physical layer impairment (Fig. 1, col. 3, line 14-59, col. 4, line 46-59, col. 8, line 22-47), and Collins discloses monitoring and controlling of remote communication devices (Abstract), whereby the architecture includes a remote computer system communicating with a local computer system, wherein the remote server modem is able to detect errors at the client modem through diagnostic techniques (Fig. 5, col. 7, line 22-67, col. 8, line 1-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement detecting errors in a remote location where there exist broadband modems with the use of a server/router as taught by the combined teachings of Ramanathan and Collins with the teachings of Lucas for the purpose of improving throughput, scheduling maintenance without disrupting service and increase security.

Regarding claims 3 and 4, as indicated above, Lucas discloses a communication system wherein devices such as DSL or cable modems have a data connection to the Internet, PSTN and POTS, whereby configuration data is obtained from a remote server via POTS lines utilizing DTMF tones (paragraph 0004-0008), he further teaches acknowledging errors in a message from a remote server (paragraph 0017-0021), and sending diagnostics messages/opcodes (diagnostic codes are transmitted from server, page 2, paragraph 0014-0018, page 3, line 1 thru paragraph 0026) from remote server via POTS to a client.

Regarding claim 9, as indicated above, Lucas discloses a communication system wherein devices such as DSL or cable modems have a data connection to the Internet, PSTN and POTS. Lucas further discloses a remote server waiting for a POTS connection/detecting POTS service (paragraph 0008).

Regarding claim 10, as indicated above, Lucas discloses a communication system wherein devices such as DSL or cable modems have a data connection to the Internet, PSTN and POTS. Lucas further discloses a unique client identifier/user of modem (paragraph 0023 & 0025).

Regarding claim 14, as indicated above, Lucas discloses a communication system wherein devices such as DSL or cable modems have a data connection to the Internet, PSTN and POTS. Lucas further discloses a configuration process that include obtaining configuration data and setup parameters from a remote server, and the ability to communicate and pass

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digital data such as the configuration and setup parameters over the POTS line using DTMF is utilized (paragraph 0004 and 0020).

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lucas in view of Ramanathan et al and Collins et al as applied to claim 1 above, and further in view of Bullman et al.

Regarding claim 16, as indicated above, the combined teachings of Lucas, Ramanathan and Collins discloses a communication system wherein devices such modems, remote servers, clients communicate diagnostic data in a broadband environment whereby the architecture includes POTS, PSTN and DTMF utilization. On the other hand, Lucas, Ramanathan and Collins fail to teach or suggest a central office that includes a DSLAM coupled to a data network. However, Bullman discloses remote management and analysis a broadband environment wherein the architecture includes a DSLAM coupled to a data network (Fig. 4, paragraph 0046-0048). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement and a DSLAM coupled to a data network as taught by Bullman with the combined teachings of Lucas, Ramanathan and Collins for the purpose of accommodating high and low frequency data in association with system diagnostic.

5. Claims 5 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lucas in view of Ramanathan et al and Collins et al as applied to claims 1 and 15 above, and further in view of Astarabadi.

Regarding claims 5 and 21, as indicated above, Lucas, Ramanathan et al and Collins discloses monitoring and performing diagnostic schemes for detecting faulty communications

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between communicating server and client devices as associated in a broadband modem environment, but they fail to teach Web Server on the broadband modem to a client computer's Web-browser. In a communication system that uses diagnostic schemes that defines constraints for the purpose of detecting system faults, Astarabadi discloses monitoring faults with the use of client workstation that includes browser software application and the hardware includes broadband cable modem for implementing communication with the web server through the Internet, browser accesses web-page (col. 3, line 4-60, col. 7, line 35-46, col. 8, line 36-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement Web Server on the broadband modem to a client computer's Web-browser as taught by Astarabadi with the combined teachings of Lucas, Ramanathan and Collins for the purpose of further monitoring and displaying detected events in a communication system.

Allowable Subject Matter

6. Claims 2, 6-9, 11, 12, 13, 17-20, 22, 23 and 26-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: Although the combined prior art discloses communicating diagnostic testing and monitoring from a remote device as communication exist between server and client in a broadband communication environment, they fail to teach or suggest detecting that a broadband circuit cannot be provisioned over a twisted pair connected to broadband modem, detecting that DSL tone does not exist on a twisted pair connected to a broadband modem, determining that a broadband modem cannot synchronize with a DSLAM, determining that a PVC cannot be

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established from a broadband modem, ascertaining that new information associated with errors has not yet been sent to remote server, ascertaining that a broadband circuit has not been provisioned within a predetermined time, sending information associated with communication error, broadband modem that includes DTMF transceiver, and another broadband modem coupled between a broadband modem and a DSLAM.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prenell P. Jones whose telephone number is 571-272-3180. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones



September 17, 2005



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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2667

9/17/05